Close Reality – An Entrepreneurial Component
in Management Education

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Abstract

Entrepreneurship can only be grasped, if it is experienced. This paper describes the features of an entrepreneurial MBA program that follows the systemic-constructivist management approach by integrating normative-rational knowledge into the socio-cultural context. This is achieved by "close reality", a clinical component, where students develop a new business, which can be the creation of a new enterprise, the establishment of a new business segment within an existing enterprise, the takeover of an existing enterprise in a turnaround situation or the foundation of a new subsidiary of an existing enterprise in another country.

To support the cultivation of the students' entrepreneurial awareness and competence we concentrate on experienced students (more then five years of professional experience), and included a coaching component – we call it competence development – that is based on the solution-focused approach and the concept of competence as self-organization disposition.

The essential principles of the clinical component are (1) the holistic consideration of both normative-rational issues, like strategy, structure, financials, and socio-cultural issues, like identity, leadership, or corporate culture, (2) the affiliation of knowledge and experience, intellect and intuition, (3) a high degree of motivation based on a real case with proximate impact on the students' personal social and financial success or professional advancement, and (4) immediate feedback by scientific staff, fellow students and, if applicable, clients in multiple feedback loops.

The application of these principles is presented using two examples of the successful establishment of new businesses that originated in the clinical component of our program.

Close Reality – An Entrepreneurial Component in Management Education

1. The controversy over management and entrepreneurship education

Business schools have experienced notable growth both in the number of students and in the number of institutions. A quick inquiry in any of the major web search engines indicates that the number of MBA programs has also increased in German-speaking countries over the last decade. The impact of both management education and entrepreneurial education has been controversially debated. Critical comments, like that there is "less success than meets the eye" (Pfeffer & Fong, 2002) or that these programs are "teaching the wrong people in the wrong ways with the wrong consequences" (Mintzberg, 2004) have been commonly cited in executive education literature. The financial crisis since 2007 has raised even more acute questions on the effectiveness, the purpose, or even the harm of management education programs. "Perhaps we will become acutely aware of the absurdity of training future managers in terms of abstract decision making techniques only, largely ignoring the complex dynamics of real life in organization" (Stacey, 2010: 228).

When we designed a new MBA program at the climax of the dotcom-bubble and started it short after the burst, we introduced a significant entrepreneurial component, which is the core of the whole program. The plan was to offer an entrepreneurial perspective to those students who are latently interested in self-employment, and, drawing from the idea of intrapreneurship (Pinchot, 1985), to create entrepreneurial awareness in those students, who prefer a management career. The fundamentals of the program's concept have not changed over the years, and we are even more convinced of the model now in the era of the mother of all financial crises, when business schools are urged "to provide opportunities for managers and leaders to understand what they are doing in reflexive ways" (Stacey, 2010: 228).

Designing a management education with an entrepreneurial emphasis raises the question, if entrepreneurship can be taught at all. Only few scientists in the area of entrepreneurship claim that they have actually experience as entrepreneurs. Some of those who have, like David Birch, say that it is impossible to teach people to be entrepreneurs (Aronsson, 2004: 289). The "three skills that an entrepreneur needs to know and master [are] selling, managing people, and creating a new product or service. And none of them are taught in the business school" (290). On the other hand, there is "preliminary evidence that entrepreneurial attributes can be positively influenced by educational programs and that many entrepreneurship programs and courses are able to build awareness of entrepreneurship as a career option and to encourage favorable attitudes towards entrepreneurship" (Gorman, Hanlon & King, 1997: 63). Katz (2007: 223) found that "the proof that non-entrepreneurs can successfully teach entrepreneurs is evident". We conclude that it is possible to teach entrepreneurship, but it is necessary to overcome some deficiencies in entrepreneurial education.

2. Deficiencies in entrepreneurial education

Contemporary entrepreneurial education is affected by three deficiencies. First, there is an overemphasis on analysis and techniques at the expense of developing personal skills. Second, there is a narrowed view on new firms as high-growth ventures, although most new enterprises have a moderate lower growth rate which does not mean they are a failure. Third, the socio-cultural dimension is widely ignored in the education of managers as well as entrepreneurs, mainly because it is difficult, if not impossible, to teach it in a lecture room situation or with case studies. The socio-cultural dimension can only be grasped if it is experienced.

2.1. The first deficiency: Overemphasis on analysis

Much criticism has been made on the overemphasis on analysis in business management education. There is an old joke that MBA stands for "management by analysis". Mintzberg (2004: 38) even polemicizes that management is reduced to decision making, decision making is reduced to analysis and analysis is reduced to technique. Paying too much

attention on quantitative analysis is at the expense of developing leadership and interpersonal skills as well as communication (Porter, McKibbin 1988: 65). "Contemporary business education focuses on the functions of business more than the practice of managing" (Mintzberg & Gosling 2002: 28)

2.2. The second deficiency: Narrowed view on new firms

Whoever operates a business school program with an entrepreneurial component should reflect who can benefit from their education. There are various motivations for starting a business. Some entrepreneurs start a venture with the intention of fast growth. These founders already have the concept for a promising product or service, they usually depend on venture capital to cover the financial needs of conquering the market and they have to deal with many organizational changes on their way from the backyard garage to the multinational corporation. Others start their business as a form of self-employment, in some cases involuntarily after they lost their jobs as employees, in many cases voluntarily to be independent from an employer. The heaviest initial challenge for these entrepreneurs is developing their product or service ideas to a marketable form and build up selling power. A third group, who amazingly is widely ignored by business schools, are existing entrepreneurs who want to improve their entrepreneurial skills. They learn like the others, but they contribute to the program considerably more and thus are very valuable participants. And there is an important fourth group of potential students, individuals who prefer a management career (and usually are already managers) and who feel that they need entrepreneurial awareness for advanced tasks like starting new business segments within existing companies or expanding the business into new markets.

In our perception this plurality of motives is not sufficiently recognized by business schools. Katz (2007: 216) pointed out that "economists think of every … smaller firm as alike, but research clearly shows two types of smaller firms: the classic small business, which provides a substitute income to employment by others, with modest prospects for growth, and high-growth ventures that start small but grow into major firms like Google or Microsoft." Consequently, entrepreneurial education concentrates on issues like innovation, funding, and organizational development. Excellent models of the entrepreneurial process have been developed in the last decades, e.g. the model depicted

in Baron & Shane (2008: 16) that we actually use in our entrepreneurship lectures. It describes six key phases of the entrepreneurial process: New idea or opportunity recognition; Initial decision to proceed; Assembling the required resources; Actual launch; Building a successful business; Harvesting the rewards (exit by founders). These instructive models are very useful for teaching, but unintentionally they are possible to contribute to the narrowing of the view on new firms, particularly in education which emphasizes analysis, models and techniques, so the narrowing might be amplified by the above noted first deficiency.

2.3. The third deficiency: Teaching entrepreneurship instead of making it an experience

Linking research and teaching is an essential requirement of every academic education. In some academic fields, particularly in social and economic sciences, experience should be integrated as a third element. It is precisely the connection of these three dimensions – in whatever order – that is crucial for the process of cognition. Unlike in natural science there are no universally valid principles in economics – in our domain the apple doesn't always fall straight down, sometimes it makes a bow or even starts to float – and so we have to content ourselves with probability structures in our conclusions. This enhances the importance of expert knowledge, which has to be integrated into teaching, and the best way of integration is to experience it in action.

Organizational development is a product of normative-rational professionalism and socio-cultural abilities (Herbek 2010 a: 31). A lack of one of these can not be compensated by the other – zero times infinite still equals zero. Normative-rational professionalism and socio-cultural abilities manifest in the acting individuals (notably managers and experts) of the organization as well as in the rules that inhere in every social system. These rules usually become independent from the individuals in the course of time (Luhmann 1984).

Integrating socio-cultural issues pushes the boundaries of traditional entrepreneurial education. The normative-rational dimension can easily be explained (yet sometimes not immediately understood) in the laboratory-like situation of the lecture room or in the study of business cases, but the socio-cultural dimension usually eludes being imparted

authentically, and transporting the inherent rules of a social system in a lecture auditorium is virtually impossible. This is a central educational problem in applied social and economic science, and particularly in entrepreneurial education.

Lessons can be learned from medical studies, where the affiliation of academia and experience is perfectly accomplished by the integration of a teaching hospital. It enables the students to immediately practice their acquired academic (normative-rational) knowledge at a hospital patient and to experience the socio-cultural dimension of being a medical professional: Exposition to stressful situations, dealing with difficult patients, explaining shocking prognoses, the need to make decisions under uncertainty, ethical challenges or emotional involvement.

The thesis statement that forms the basis of our program is: Entrepreneurship can only be grasped, if it is experienced.

Before we discuss the principles, structures and contents of our educational concept "Close Reality", it might be helpful to define essential terms that are used in the following chapters. This will illustrate how and where the third element – experience – is introduced and how the three elements – research, teaching, and experience – are linked up, following the systemic approach that the correlations between elements are crucial rather than the particular elements themselves. Our MBA program is based on a systemic-constructivist understanding of management. In contrary to a deterministic (causalistic) management understanding, which presumes controllability of an organization, the systemic-constructivist approach accepts that complex social systems can not be controlled and should better be influenced in a target-oriented way.

3. Overcoming the deficiencies: Systemic-constructivist management approach

Malik (2000: 81) describes two paradigmatically different ways of understanding the management of enterprises. The first is deterministic ("techno-causalistic") and based on the machine model, the other one is systemic-constructivist and based on the model of a living organism.

Techno-causalistic management starts with analyzing tasks and processes within the system, and it assumes that these elements can be composed in the "right" way to design the optimal organization. It is based on the premiss of causality within a complex system and ignores interpersonal relations. It focuses on the normative-rational dimension and entirely fades out the socio-cultural dimension.

The fundamental idea of systemic-constructivist management is the organism analogy. But is it possible to transfer research findings for living systems to social systems? Sociologist Niklas Luhmann (1984 and 2000) is one of the main promoters of this idea. Social systems are never made; they develop, learn from mistakes, perish, and are replaced by new ones. Social systems are widely self-organizing (Steinkellner 2007: 63-64).

Following this approach, the complexity of management increases and so does the discomfort of managers and entrepreneurs and their fear of being unable to control the system. Consequently, the socio-cultural dimension is often neglected, and techno-causalistic approaches are preferred. We assume that this also applies to most management and entrepreneurial education.

4. The features of our entrepreneurial MBA program

When the "Intra- and Entrepreneurship" MBA program started at a state accredited private university in Austria (PEF Private University of Management, Vienna) in 2002, it followed the style of the Anglo-Saxon business school model, with a significant share of instructors from US-American and British universities, and with a strong international orientation. There was some kind of differentiation from other programs, like the concentration on professionally experienced students, but in the main it adopted the typical academic entrepreneurship education model that consists of two cores, with the first one providing knowledge of the functional areas of business (like accounting, finance, marketing, management), and the second focusing on the completion of a business plan (Katz 2007: 213). The program received good evaluations, but at that time competition significantly

increased as various business schools started MBA programs mostly with American partner schools, and we concluded that our program should develop more differentiation. In 2004 we redesigned it to overcome the above mentioned deficiencies we had investigated and started in fall 2004. Until now ten classes with approximately 160 students have passed the Intra- and Entrepreneurship MBA.

We classify the characteristics of the program into three elements: Content, didactic elements, and the clinical component.

4.1. Content

It would not make sense to abstain from teaching business functions in an entrepreneurial program, but it has to be taken into account that entrepreneurs use knowledge individually. They "hinge on information that is not codified or highly idiosyncratic" (Markman 2007: 72), so they "codify, process, and utilize that knowledge differently" (73). In respect to content we found it beneficial to start with strategy, innovation, and organizational behavior. There is a lot of analysis and technique in these subjects, but, in contrast to for instance accounting, they leave space for reflection and expressing individual views. Next we found it valuable to support students in deploying leadership skills and emotional intelligence. Here it is obvious that benefits are mainly drawn from experience, but we wanted to impart a research-based fundament, so we intensified our existing courses in leadership and added courses in social psychology with a strong focus on group behavior. Experience is built-up in our "leadership lab", a didactic element which is described below. Finally we found that is makes sense to reduce analytical skills training (including financials, IT, process management, project management, marketing and law) to the ability to communicate with experts in these areas in a feasible way, using their preferred terminology. The goal is to deploy communicative competence to be able to lead a team of financial, legal, marketing, logistics or IT experts or to outsource some of these tasks, if the enterprise is intended to grow slowly.

4.2 Didactic elements

The findings in respect of didactic elements cultivating entrepreneurial awareness and competence include the concentration on experienced students. The minimum access requirement is five years of professional experience including significant management experience. Students are practicing managers, they attend courses once a month (Thursday to Saturday) and return to their work environments after the courses. It also turned out to be advantageous for an entrepreneurial program to be established at a smaller university: At universities the customers (i.e. the students) are an integral part of the organizational structure, and that is likely to intensify the interaction between instructors and students (Zehetner 2006: 185) – of course only if the university is not a degree factory. We have also introduced a coaching element that we call competence development, which is based on the solution-focused approach (de Shazer 1997, Lueger & Steinkellner 2011), and the concept of competence as self-organization disposition (Erpenbeck & Rosenstiel 2005; Steinkellner & Czerny 2010; Steinkellner & Czerny in press). Here we take advantage of the fact that our university traditionally has a core area in human resource management and coaching, so appropriate knowledge and skills are available in the core faculty. Part of the competence development is the "leadership lab", a three day outdoor event where the group has to complete jobs – like crossing a gorge on a self-built rope bridge or abseiling into a canyon – in a self-organized way, beginning with choosing some of the group members to form a management team who is responsible for planning, procurement, and allocation of resources. Only security and procurement of the necessary equipment are beyond the group's responsibility and outsourced to professional alpinism trainers.

4.3 Clinical component

The essential principles of the clinical component ("Close Reality") are (1) the holistic consideration of both normative-rational issues and socio-cultural issues, (2) the affiliation of knowledge and experience, intellect and intuition, (3) a high degree of motivation based on a real case with proximate impact on the students' personal social and financial success or professional advancement, and (4) immediate feedback by scientific staff,

fellow students and, if applicable, clients in multiple feedback loops. At first sight, our clinical component might look like the business planning courses that are most common in entrepreneurial programs, so in the next two chapters we want to elaborate how we attempt to meet the above claims.

5. An alternative (experience-oriented) approach: The clinical component

The development of a business plan long ago has been investigated to be the most important feature of entrepreneurship courses (Hills 1988), albeit this is subject to critical reviews: Honig (2004: 258) argues, that "neither the teaching of business plans, nor the plans themselves, are sufficiently justified on the basis of theoretical or empirical literature …There is little or no conclusive proof that [business planning] helps students learn the requisite aspects of the field, or that it is of any benefit should they eventually decide to become entrepreneurs". Further, "once a plan is written, it may psychologically limit the framework of options available to an organization and be outdated due to a constantly changing environment". (260)

To overcome these concerns we have developed "Close Reality" (The term is also used in HR development concepts, Herbek 2010 b). A medical study without integration of a teaching hospital can hardly be imagined, and for entrepreneurial education the same form of integration – let us call it clinical component – is desirable to build the bridge between academia and industry, to enter it, and to explore and affiliate both worlds. The philosophy follows the systemic-constructivist paradigm, thusly considerably increasing the challenges for a university-level education, as the task is not only to transfer knowledge – which seems to be sufficient according to the techno-causalistic paradigm – but furthermore to suggest an understanding of organizations as holistic social systems with complex interpersonal relations and implicit rules.

The pivotal challenge for an entrepreneurial or managerial education following the systemic-constructivist paradigm is integrating normative-rational knowledge into the socio-cultural context, systematically discovering opportunities, collect applied experience, and incorporate all this into a concept of entrepreneurial or managerial work.

In the middle of the two year program each student has to present a project in an elevator speech to the class and to the instructors. Approximately 40% of the projects are selected for proceeding, with the selection being done conjointly by students and instructors. An intervention might be necessary, if the plan seems unable to be finalized within six months, or if there are any other obstacles apparent. The students then form groups of two or three who cooperate in developing the project.

The project can be the creation of a new enterprise, the establishment of a new business segment within an existing enterprise, the takeover of an existing enterprise in a turnaround situation or the foundation of a new subsidiary of an existing enterprise in another country. To give the task a conceptual framework, the development is recorded and presented in the form of a business plan. The above cited arguments against business planning do not appear in our setting, because the students either start their own real business or they have an explicit client – the entrepreneur or the responsible manager – and they permanently cooperate on the project with the client, with other students, and with our scientific staff over a period of six months. This triggers a high degree of motivation because the real case has proximate impact on the students' personal social and financial success or professional advancement. The status is presented monthly to the class, and so there is feedback by scientific staff, fellow students and, if applicable, the clients in multiple feedback loops with emphasis on both normative-rational and socio-cultural issues.

Working "Close Reality" increases the motivation for all involved stakeholders – teachers as well as students – and uncovers complexity that usually is missed in the laboratory situation of a lecture room or the work on case studies. Besides the broad variety of normative-rational issues (like strategy, organization, marketing, sales, and finance), socio-cultural aspects appear, like: To what extent do the members of the student group believe in the project and the acting persons (e.g. the client)? What kind of relationship between the group and the client develops and to what intensity? How does the history of the company interfere with the project, especially when the task is the creation of a new business segment within an existing enterprise? If, what is common, resistance against

change, but also willingness to change appear in the course of the project, where or who are the activating and where/who are the obstructing forces? Precariousness, discomfort or even alienation in the client system may be perceived.

In the end, passable solutions have to be found, that consider both, rational necessities (like a critical view of the core competencies, differentiation, competition, and of course financials) as well as all socio-cultural factors. In some cases it is necessary to say a clear "no" to a project, to advice against the founding of the new venture or business segment, and to communicate this perspective in a socially compatible way to the client. In this context "Close Reality" occurs.

6. Examples for businesses that originated in "close reality"

Up to date some 60 businesses have been developed by our students, with a distribution of about half new enterprises and half new business segments within existing enterprises. Our key evaluation criterion for the impact of the clinical component is the share of successfully implemented projects: Until now, approximately 50% arrived at reality. They represent a broad range of industries from dental technology to CNC plasma cutting, from environmental consulting to ecological fish farming, from prefabricated houses to the hotel business, from cancer research to the funeral industry.

Exemplarily we want to present two projects – the start-up of a subsidiary in another country that involved the establishment of a new business segment and the foundation of a new enterprise – where the interdependence of the normative-rational and the socio-cultural dimensions became distinctively visible. This way we want to point out both the procedure and the effectiveness of "Close Reality".

6.1. Overcoming a mental blockade to do something different from the headquarter

Austrian company A, belonging to the commercial cleaning industry, intended to open a subsidiary in one of the major cities in western Romania. After the fall of the iron curtain a huge number of western companies had entered the Romanian market, including many

from Austria and other German speaking countries. These corporations, many of them already clients of company A in Austria, formed a good customer basis. The plan was to offer premium (and high-priced) cleaning services mainly in the food processing and in the health service industries. Provided with data from the parent company, and highly motivated to do research on their own it was no big deal for the students (one of whom is a senior manager in the parent company) to develop the marketing strategy, to design the services, and to calculate the profitability. Yet there appeared a strategic challenge that was urged by fellow students as well as by the scientific staff: The project group proposed to additionally offer low-priced cleaning services in an attempt to attract local Romanian customers and so to facilitate growth.

Apparently, offering low-priced as well as high-priced services causes a bunch of problems. Labor cost is quite different between office cleaners and highly qualified cleaning staff in a hospital's surgery department. Training for skilled cleaners in the food processing industry with its elaborated hygiene specifications requires specialized seminars that may be adequate only for educated employees, while instructing office cleaners can be done on the job. Performance evaluation of high-qualified personnel is oriented on qualitative criteria, while low-qualified personnel are assessed on the basis of quantitative rates (like square meters per hour). Usually the supervision of unskilled workers is more direct than the supervision of skilled staff. Low-priced services need to be standardized, high-priced services usually are individualized. Last but not least the company's image is shaped by the low- or high-price profile.

Of course the importance of distinguishing between a cost leadership strategy and a differentiation strategy is familiar to the students when they start their entrepreneurial project, so it was amazing why they sticked to the idea of mixing both strategies in the subsidiary, and investigating the reasons was the trigger to integrate the socio-cultural dimension. It turned out that the parental company in Austria had just introduced the specialized cleaning services a few months ago, while they had long experience in offering low-cost cleaning services. Without instantly realizing it, the company had become exposed to an unclear strategic positioning. It is a common experience that strategic ambiguity does not necessarily lead to immediate problems, it can take years until they

become apparent to everyone – but then the damage might be irreversible. It was the establishment of the foreign subsidiary that disclosed the problem. But it is not so easy to suggest a different strategy in a subsidiary, it will probably be perceived as criticism on the Austrian headquarter, so the expectable consequence was a mental blockade. Discovering this context was an exciting event for the project group. Still they had a tough task to complete: to convince the senior management of rejecting the idea to offer low-priced services in Romania.

6.2. The delicate decision to let loose

Company B was a manufacturer and lessor of agricultural and forestral machinery. The cash cows were forestral trailers for trucks and tractors. It was foreseeable that this cash cow would produce less milk in the future. Luckily a successor was about to be launched: the pelletsmaker. This machine was designed to process lumber waste that remained from timber harvesting into wood pellets for heating purposes. This lumber waste usually is disposed by fire or simply left for rotting. So the basic idea was to convert the waste into a marketable product. Instead of collecting the material and transporting it to a stationary pellet plant, the "factory" should be transported on a semi-trailer truck to the material, process it to pellets, and distribute the finished goods locally. The reduction of transport routes and the facilitation of logistic formed the basis of a favorable calculation of the product costs.

The project was a start-up, a foundation of a new enterprise. However, in the course of the project development, the team came up with the proposal to integrate the stalling business of the existing company into the new venture. This was surprising, as the businesses were completely different, with only some overlap in the customer groups. The cheap and technically simple forestral trailers were likely to corrupt the high-tech image of the pelletsmaker, and obviously all the problems of strategic ambiguity could be expected in this context. The project group made substantial efforts for a strategy definition that could justify the proposal, like using two brands, but it was visible that this was just a kind of self-excuse. We decided to investigate the reasons of this proposal, and it turned out that they were solely socio-cultural. There was some fear that the new product could flop on the

market, and the old products were perceived as a fall-back solution. The project also was part of a generation change in the company. One of the group members – the one who had the business idea for the pelletsmaker – was a younger relative of the old company's founder. He did not want to displease the senior, and this caused a mental resistance against a revolutionary access to the future. There was no problem in defining the core competences, formulating the marketing strategy, assembling the required resources or funding the project – i.e. in the normative-rational dimension. The real difficult part of the project was socio-cultural: The delicate decision to let loose.

7. Conclusion

This paper discusses the features of an entrepreneurial MBA program which follows the systemic-constructivist management approach by integrating normative-rational knowledge into the socio-cultural context. Normative-rational issues are easily teachable, but socio-cultural issues can only be touched on in the lecture room situation, so the integration of both dimensions is hard to accomplish. Case studies are a helpful approach, but in most cases they do not trigger emotions in the students. Working on a real case can initiate emotions like passion, confidence in one's own concept, and identification with the idea – just like in medical studies, were the integration of a teaching hospital is a matter of course.

To achieve the target we have introduced "Close Reality", a clinical component, where students develop a new business. Fictional business plans do not enable the experience of the socio-cultural dimension. We suggest using real projects instead, where the project team members either have an entrepreneur or manager as client or develop their own start-up venture. The contact to the client or the personal involvement of a student who builds up his or her own business is essential for a holistic understanding of entrepreneurship.

The affiliation of knowledge and experience, intellect and intuition, and sufficient time for reflection are essential. For the evaluation of the intermediate presentations of the business plan we developed some boldness in incorporating our gut feeling. Too little as

well as too much persuasive power in the presentations is suspicious: Normative-rationally correct but without passion, or conceptionally insufficient but with a dazzling sales show. Unfortunately it is impossible to immediately recognize the success of our interventions, because the realization of the projects will usually exceed the length of the study. We admit that to completely fulfill the claim of "Close Reality" it would be necessary to incorporate the evaluation of the whole project as a learning input.

In many projects the conflict between normative-rational needs and socio-cultural feasibility becomes apparent. Integrating both forces without making a rotten compromise requires (and develops) creativity, emotional power, empathy and persistence. In reality it is usually the normative-rational dimension that misses out, in academic education it is the socio-cultural dimension that is ignored. Close Reality attempts to affiliate both components.

References:

Aronsson, D. 2004. Education Matters – But Does Entrepreneurship Education? An Interview with David Birch. **Academy of Management Learning and Education**, 2004, Vol. 3, No. 3: 289–292.

Baron & Shane 2008. Entrepreneurship. A Process Perspective (2nd ed.). Mason OH: South-Western.

De Shazer, St. 1997. Putting Difference to Work. New York: Norton.

Erpenbeck, J. & Rosenstiel, L. v. 2005. Kompetenz: Modische Worthülse oder innovatives Konzept?. **Wirtschaftspsychologie aktuell**, 2005(3): 39-42.

Gorman, G., Hanlon, D., King, W. 1997. Some research perspectives on entrepreneurship education, enterprise education and education for small business management: a ten-year literature review. **International Small Business Journal**, April-June 1997 v15 n3: 56-77

Herbek, P. 2010 a. Strategische Unternehmensführung. Wandel fördern und Stabilität sichern. Wien, München : mi-Wirtschaftsbuch, Finanzbuch Verlag.

Herbek, P. 2010 b. Personalentwicklung Close Reality. Magazin Training 3/2010: 44-46

Hills, G. 1988. Variations in university entrepreneurship education: An empirical study of an evolving field. **Journal of Business Venturing**, 3: 109–122.

Honig, B. 2004. Entrepreneurship Education: Toward a Model of Contingency-Based Business Planning. **Academy of Management Learning and Education**, Vol. 3, No. 3: 258–273.

Katz, J.A. 2007. Education and Training in Entrepreneurship. In: Baum, J.R., Frese, M., Baron, R.: The Psychology of Entrepreneruship. Mahwam: L. Erlbaum Associates. 209-236

Lueger, G., Steinkellner, P. 2011. Solution-Preventing Tools versus Solution Supporting Tools. In: Buono, A., Grossman, R., Lobnig, H. and Mayer, K. (Eds.), The Changing Paradigm of Consulting: Adjusting to the Fast-Paced World. Charlotte, NC: Information Age Publishing.

Luhmann, N. 1984. Soziale Systeme. Grundriß einer allgemeinen Theorie. Berlin: Suhrkamp

Luhmann, N. 2000. Organisation und Entscheidung. Opladen/Wiesbaden: Westdeutscher Verlag

Malik, F. 2000. Systemisches Management, Evolution, Selbstorganisation. Grundprobleme, Funktionsmechanismen und Lösungsansätze für komplexe Systeme (5th ed.). Bern: Haupt

Markman, G. D. 2007. Entrepreneurs' Competencies. In: Baum, J.R., Frese, M., Baron, R.: The Psychology of Entrepreneruship. Mahwam: L. Erlbaum Associates. 67-92

Mintzberg, H., & Gosling, J. R. 2002. Reality programming for MBAs. **Strategy and Business**, 26(1): 28-31.

Mintzberg, H. 2004. Managers Not MBAs. A Hard Look at the Soft Practice of Managing and Management Development. San Francisco: Berrett-Koehler Publishers.

Pfeffer, J., Fong, C.T. 2002. The End of Business Schools? Less Success Than Meets the Eye. **Academy of Management Learning & Education**, v1, n1. http://www.aomonline.org

Pinchot, G 1985. Intrapreneuring: Why you don't have to leave the corporation to become an entrepreneur. New York: Harper & Row.

Porter, L. W., & McKibbin, L. E. 1988. Management education and development: Drift or thrust into the 21st century. New York: McGraw-Hill.

Stacey, R.D. 2010. Complexity and Organizational Reality: Uncertainty and the Need to Rethink Management After the Collapse of Investment Capitalism. Abingdon: Routledge.

Steinkellner, P. 2007. Systemische Intervention in der Mitarbeiterführung. Heidelberg: Carl- Auer-Verlag.

Steinkellner P. & Czerny, E. 2010. Lösungsfokussiert-kompetenzorientierte Bildungs- und Laufbahnberatung. Magazin Erwachsenenbildung.at. Issue 9/2010: 11/3-11/10

Steinkellner P. & Czerny, E. (in press), Lösungsfokussiertes Kompetenzmanagement mit NextCompetence. In G. Lueger (Hrsg.), Lösungsfokussierte Analysen und Assessments. Mering: Hamp.

Zehetner, K. 2006. Master of Leadership? Erfolgreiche Führung in privaten Hochschulen. In: Hinterhuber, H., Pircher-Friedrich, A., Reinhardt, R., Schnorrenberg, L.: Servant Leadership. Prinzipien dienender Unternehmensführung. Berlin: Erich Schmidt. 181-199.